

AN ARCHAEOLOGICAL SURVEY OF A PROPOSED SCHOOL SITE  
IN CENTRAL MONTGOMERY COUNTY, TEXAS

Texas Antiquities Permit 3107

by

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AN ARCHAEOLOGICAL SURVEY OF A PROPOSED SCHOOL SITE  
IN CENTRAL MONTGOMERY COUNTY, TEXAS

BVRA Project Number 03-10

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## **ABSTRACT**

An archaeological evaluation of a proposed school site (17 acres) in central Montgomery County, Texas was performed by Brazos Valley Research Associates (BVRA) in April 2003 with William E. Moore the Principal Investigator. This project falls under the Antiquities Code of Texas and was performed under Antiquities Permit 3107 issued by the Texas Historical Commission, Archeology Division for this project. No previously recorded sites exist within 1/2 kilometer of the project area, and no archaeological sites were found during the archaeological survey. Therefore, it is recommended that the Conroe Independent School District (ISD) be allowed to proceed with construction as planned with no further archaeological investigations. Copies of this report are on file at the Texas Archeological Research Laboratory (TARL); Texas Historical Commission, Archeology Division; Conroe ISD; and Brazos Valley Research Associates.

## **ACKNOWLEDGMENTS**

Brazos Valley Research Associates is appreciative of the assistance provided by the following. At the office of HBC Terracon in Houston, Texas, C. Harold Cobb, P.E. and Geni Stevens provided maps and other logistical support. Bobby Burns was the representative for the Conroe ISD for this project. Allegra Azulay, Records File Search Assistant at TARL, performed the file search for previously recorded sites. Edward P. Baxter, Project Archaeologist, conducted the field survey. Mark H. Denton at the Texas Historical Commission, Archeology Division, served as the reviewer for this project. The figures appearing in this report were prepared by Lili Lyddon of LL Technical Services in North Zulch, Texas.

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## INTRODUCTION

Brazos Valley Research Associates was retained by the Conroe ISD through the engineering firm HBC Terracon of Houston, Texas to conduct an archaeological investigation of a 17 acre tract, the site of a proposed school in central Montgomery County (Figure 1). The project area is depicted on the USGS 7.5' topographic map Conroe dated 1958 [photorevised 1976] (map number 3095-132) (Figure 2). The area to be investigated is located within the city limits of Conroe, Texas on the west side of Interstate Highway 45. It is bounded on the north by vacant land, on the south by vacant land, on the east by apartments, and on the west by vacant land (Figure 3).

Montgomery County is located in Southeast Texas, an area known to contain significant archaeological sites. A summary of previous work by professional archaeologists in the county is summarized in the *Previous Investigations* section below. Because of the archaeological potential of the project area, especially the northeast corner, a cultural resource study by a professional archaeologist was warranted according to the Antiquities Code of Texas. This project was conducted under Antiquities Permit Number 3107.

The project number assigned by BVRA is 03-10. The field survey was conducted on April 17, 2003 by Edward P. Baxter with William E. Moore assuming the duties and responsibilities of Principal Investigator.

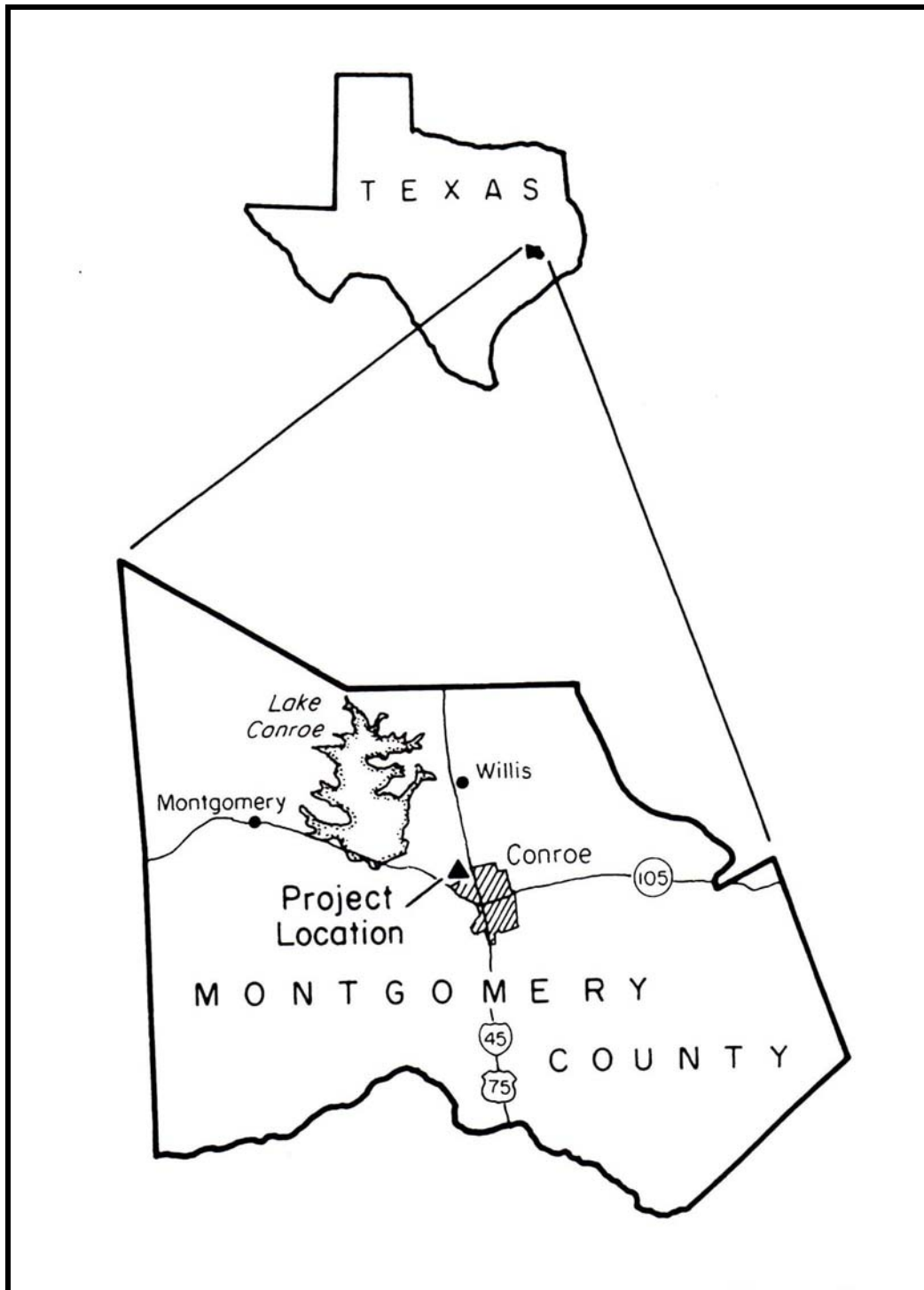


Figure 1. General Location Map

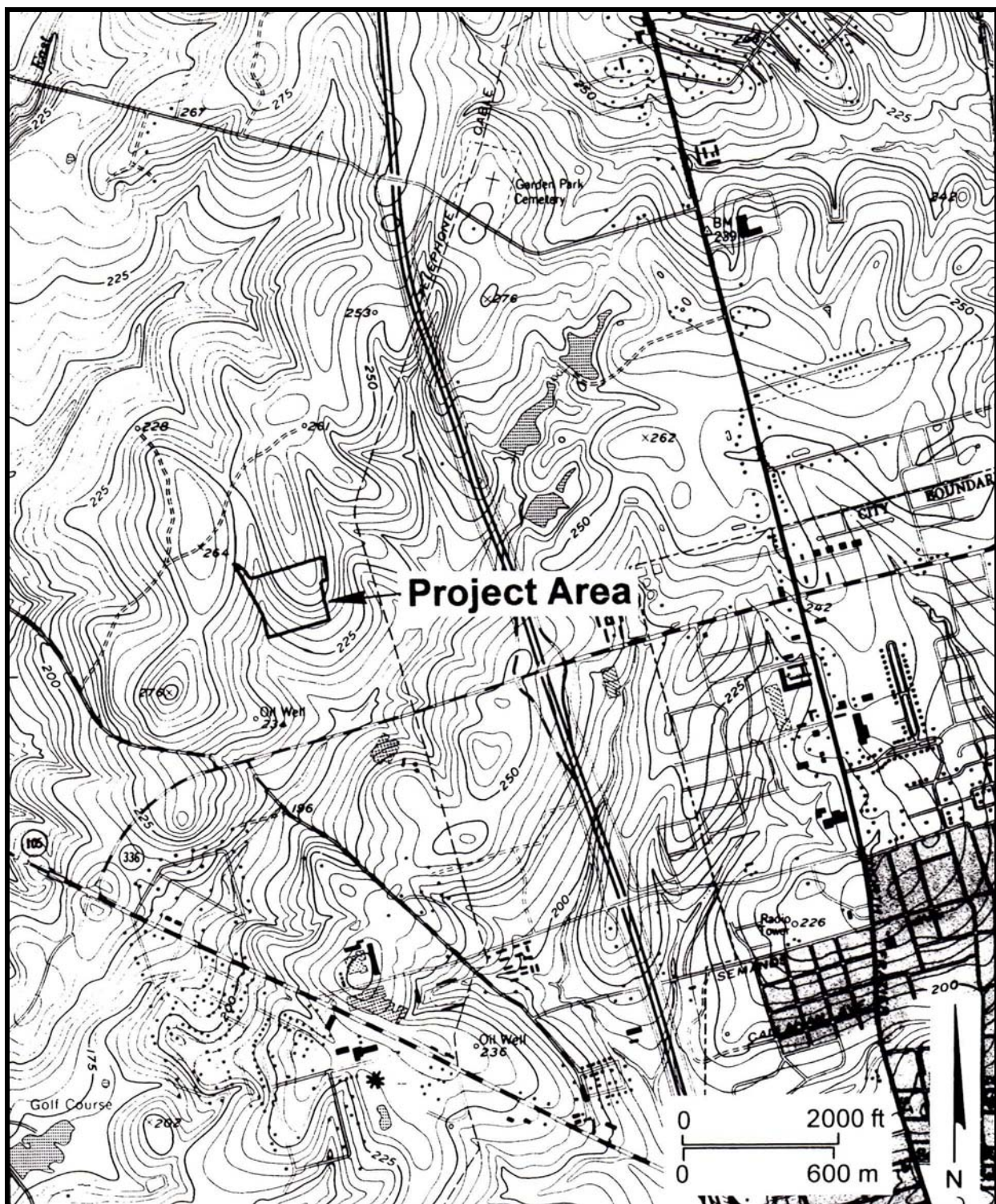


Figure 2. Project Area on Topographic Map



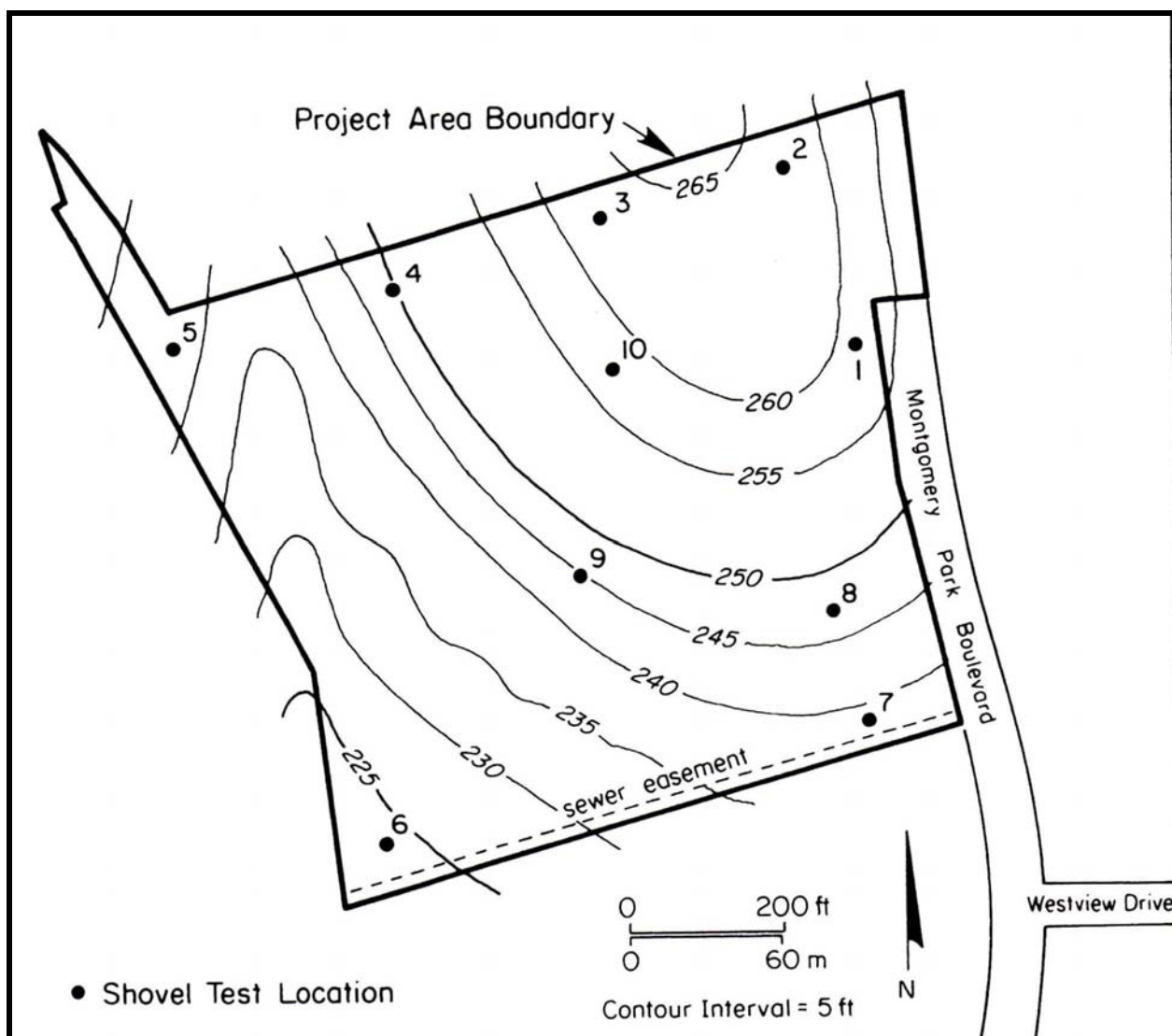


Figure 3. Project Area Map

## ENVIRONMENTAL SETTING

The following statements was summarized from the *Handbook of Texas* (Webb 1952) and the *Soil Survey of Montgomery County* (McClintock et al. 1972:1). Montgomery County, in the East Texas Timberlands Region, is bounded on the north by Walker and San Jacinto counties, on the east by Liberty County, on the south by Harris County, and on the west by Waller and Grimes counties. Montgomery County covers 1047 square miles of flat to gently rolling terrain. Vegetation is typical of the Piney Woods area with thick stands of longleaf, shortleaf, and loblolly pines and hickory, maple, sweet gum and black gum, oak, and magnolia trees. Grasses include Virginia Wildrye, blackseed needle grass, and purpletop. Wildlife in the county includes eastern gray and fox squirrels, various species of bats and skunks, and small herbivores such as gophers, mice, rabbits, and armadillos, as well as racoons, white-tailed deer, opossum, bobcat, coyote, and red and gray fox. Alligators, frogs, toads, and numerous species of snake, including the poisonous copperhead, cottonmouth, coral snake, and rattlesnake, are found in abundance. A wide variety of birds such as mockingbirds, cardinals, doves, quail, bluejays, and roadrunners, to name a few are also native to the area. The county's principal water source is the San Jacinto River basin drainage system, which includes Peach, Caney, Spring, and Bushy creeks.

The climate is subtropical humid with warm summers and mild winters. The average annual relative humidity is 73 percent, and the average rainfall is 47.44 inches. The average annual temperature is 68 degrees Fahrenheit. Temperatures in January range from an average low of 39 degrees to an average high of 61 degrees and in July range from 72 degrees to 95 degrees. The growing season averages 270 days per year with the last freeze in early March and the first freeze in late November (Webb 1952).

The following statements were taken from the *Soil Survey of Montgomery County, Texas* (McClintock et al. 1972:1). Montgomery County is in the southeastern part of Texas in the land resource area of the East Texas Timberlands, Blackland Prairie, and the Gulf Coast Prairies. The northern and western parts of the county are undulating; the south and southeastern parts are level to gently sloping. Elevation varies between 79 feet in the southern part of the county to 330 feet in the northwestern part.

According to the soil survey (Sheet 38), the entire 17 acre project area is located within one soil type. This is Boy fine sand (B0), part of the Boy Series (McClintock et al. 1972:9-10). Soils in the Boy Series consist of nearly level to gently sloping deep, moderately well drained soils that are sandy to a depth of 40 to 60 inches and have a mottled loamy lower layer. These soils are on uplands. A typical profile consists of sand (7 inches thick), loamy fine sand (40 inches thick), and sandy clay loam to a depth of more than 70 inches. These soils have a low available water capacity. Boy soils are used mainly for pine timber, but a few areas have been cleared for crops and pasture.

## ARCHAEOLOGICAL BACKGROUND

Montgomery County is located in the Southeast Texas Archeological Study Region of the Eastern Planning Region as defined by the Department of Antiquities Protection in *Archeology in the Eastern Planning Region, Texas: A Planning Document* (Kenmotsu and Perttula 1993). It is located in the Southeast Texas cultural-geographical region (Region 6) as defined by Biesaat et al. (1985:88-90) in a statistical overview. At the time the overview was published, Montgomery County was 14th in the region with 62 known archeological sites. The 62 sites comprised 3.81% of the region and .31% of the state. As of March 12, 2003, there were 187 known prehistoric and historic sites in Montgomery County (TARL site files).

The Archeological Bibliography for the Southeastern Region of Texas (Moore 1989) cites 87 references for the county. Although many of these investigations have been small area surveys, often resulting in no sites being recorded, several projects involving larger areas have been conducted. The following is a discussion of previous work in Montgomery County.

The first site to be recorded in the county is a Late Prehistoric site (41MQ1) on the West Fork of the San Jacinto River documented by E. Mott Davis of the Anthropology Department, The University of Texas at Austin, during a field trip to Montgomery County in 1956. Following this visit by E. Mott Davis, the county remained virtually unexplored until 1965 when archaeologists working for the Texas Archeological Salvage Project (TASP) surveyed an area to be affected by the proposed Conroe Reservoir (Shafer 1966). As a result of this survey 32 sites (41MQ4-41MQ36) were recorded, and three were recommended for testing.

In the spring of 1967, three sites (41MQ4 - 41MQ6) recorded during the Lake Conroe survey were tested by TASP (Shafer 1968). These excavations provided the first substantial body of data for Montgomery County and made it possible for the first time to discuss the archaeology of the area based on artifacts excavated under controlled conditions.

The next major archaeological project in the county occurred in 1971-1974 when the Kirbee Kiln (41MQ38), a pottery near the town of Montgomery that was in operation in the late 1850s, was excavated (Malone et al. 1979). This is the only historic site in the county to be excavated, and its importance is reflected in the fact that it is the first reported excavation of a "groundhog" type kiln in Texas. This is also the first site in the county to be entered in the National Register of Historic Places.

In 1975, eight years after the Lake Conroe excavations, an archaeological survey was conducted in the Sam Houston National Forest adjacent to Lake Conroe (Shafer and Baxter 1975). Three sites (41MQ41 - 41MQ43) were recorded in Montgomery County, and two sites (41WA81 - 41WA82) were recorded in Walker County.

During the summer of 1975, site 41MQ41 was tested by archaeologists from Texas A&M University (Shafer and Stearns 1975). This site is located in the area to be affected by construction of the Scott's Ridge Recreational Area. This effort was very significant at the time as it provided an opportunity for archaeologists to test and confirm the hypothesis that "prehistoric sites having considerable antiquity do occur on older landforms in the area" (Shafer and Stearns 1975:37). The work conducted at Lake Conroe only sampled sites on recent geomorphic features. The Scott's Ridge site, however, represents the first site investigated in the area that could be "tentatively placed in the Early and Middle Lithic Periods" (Shafer and Stearns 1975:37).

In 1977, the proposed Texas Loop Pipeline route was examined by the Anthropology Laboratory, Texas A&M University (Taylor 1979). The 300 km pipeline passed through the eastern section of the county, and two sites (41MQ45 - 41MQ46) were recorded in the right-of-way. It was recommended that the area around the crossing of the West Fork of the San Jacinto River be closely monitored during construction. Specific recommendations for the Montgomery County sites were not found in the report.

Probably the largest area to be investigated in the county was the site of the proposed Woodlands Development, a tract of 23,000 acres in the southern part of the county along Spring Creek. The project was initiated by the Coastal Zone Resources Division of Ocean Data Systems, Inc. under subcontract with Greiner Engineering Sciences, Inc. (1980) of Tampa, Florida in 1979. In all, this project recorded 12 prehistoric sites (41MQ63 - 41MQ74). Six of the sites are associated with the Neo-American or Late Prehistoric (corresponds to the Ceramic Period as defined by Shafer and Stearns); 2 sites contained both Neo-American (Ceramic Period) and Archaic (Lithic Period) components, and 4 sites were classified by the authors as "undifferentiated" prehistoric. No historic sites or standing structures were encountered. Not one of the 12 sites was eligible for nomination to the National Register of Historic Places. Except for sites 41MQ70 and 41MQ73, no further work was recommended. The majority of sites are described as "small and unproductive, possibly short-term or transitory habitation localities."

In 1979, the Houston Archeological Society conducted archeological investigations in Montgomery County (Operation Neidigk) under the supervision of William L. McClure (1979). The archaeologists searched for the location of one of the historic Akokisa village sites identified by H. E. Bolton (Texas in the Middle 18th Century). Due to private construction associated with Neidigk Lake, their efforts were unsuccessful. The results of their efforts is reported on in the *Houston Archeological Society Newsletter* volume 63.

In 1981, sites 41MQ70 and 41MQ73 were tested by Greiner Engineering Sciences, Inc. (1981) in order to determine their eligibility for the National Register of Historic Places. Site 41MQ70 was found to be not eligible, and site 41MQ73 was found to be potentially eligible.

In 1984, two prehistoric sites recorded in 1977 (41MQ45 - 41MQ46) during the Texas Loop Pipeline route by Taylor (1979) were tested by Heartfield, Price & Greene, Inc. (1984).

In 1986, archaeologists from the Texas Archeological Survey incorporated geomorphological, ethnohistorical, historical, and archaeological studies into their survey of the proposed Lake Creek Reservoir (Bement et al. 1987). An area of 3570 acres (20% of the reservoir flood pool) was examined, and 46 prehistoric sites (41MQ75 - 41MQ120), four with historic components, were located and recorded in the most definitive study of an area in Montgomery County to date.

In 1990, the Texas Water Development Board (TWDB) conducted a survey of the proposed wastewater treatment facilities in the Town of Woodloch (Jurgens 1990). This study revealed prehistoric site 41MQ55 to be potentially significant, and testing was recommended. In November of 1990, testing was conducted by Brazos Valley Research Associates (Moore 1990) under the direction of William E. Moore and Roger G. Moore. It was determined that additional work was needed in order to determine the eligibility of this site for the National Register of Historic Places.

The most recent project on a large scale was an archaeological survey of approximately 262 acres in central Montgomery County by Moore Archeological Consulting (Schubert et al. 2002). The entire development consists of approximately 11,000 acres; however, the Corps of Engineers only required that a smaller sample be examined. A two-stage investigation was conducted; Stage 1 consisted of shovel testing, site delineation, and excavation of test units, while Stage 2 completed site testing and conducted backhoe trenching. The investigation was limited to areas along Fish Creek, one of its tributaries, and the location of two smaller water control structures. Five prehistoric sites (41MQ175 - 41MQ179) were recorded during the Stage I survey, all of them along Fish Creek. Each of the five sites was in settings with deep sandy soil. The sites were not recommended for further work.

In addition to the projects discussed above, there have been several small area surveys, many of which did not locate sites. Those that did record sites in Montgomery County include surveys by Fox (1980), Drollinger (1986), Voellinger (1981), Nash (1991), Moore and Moore (1992), and Moore (1993). Several sites have been recorded by individuals, most of which are documented only in the site records at TARL.

A literature search was conducted by Wayne Bartholomew (1986). His work was sponsored by TARL and involved a study of a ten county area. In Montgomery County, 41MQ3 (previously recorded) was assessed, and site 41MQ58 was recorded. Roger G. Moore of Moore Archeological Consulting conducted a preliminary cultural resources assessment of the proposed Spring Lake Reservoir in which he (Moore 1991), along with a geomorphologist, identified high probability areas for prehistoric sites and discussed predictive modelling for the area. An overview of the ethnohistorical and archaeological resources of the proposed reservoir locations for the San Jacinto Project, Montgomery and San Jacinto counties, was prepared by Douglas K. Boyd and Van Tries Button (1985) for the Department of the Interior, Bureau of Reclamation.

## METHODS

Prior to entering the field, a records check for previously recorded sites in or near the project area was conducted by Allegra Azulay at TARL. The Project Archaeologist visited the project area on April 17, 2003. The area was examined by a 100 percent pedestrian survey accompanied by shovel testing. Vegetation at the time of this survey consisted of a pine forest with mixed hardwoods such as magnolias, yaupon, and a few oaks. In general, the surface visibility varied between 10 and 30 percent. Prior to this investigation the area had been surveyed and flagged making identification easy. The northwest corner of the project area, the highest elevation in the 17 acres, was viewed as the most likely location for a prehistoric or historic site. It is in this area that the majority of the shovel tests (n=5) were excavated. The rest of the project area consists of slopes to the south and west, and fewer tests were dug in these low probability areas. Two of the shovel tests excavated in the southeast corner were close to an exposed cutbank that was visually inspected for cultural materials. A digital camera was used to document the field conditions present during the survey. In all, 10 shovel tests were excavated within the 17 acre tract. All shovel tests were located by use of a hand held GPS. The UTM coordinates were transferred onto a mapping program based on a 7.5 USGS topographic map. Information regarding the depth and results of each test is presented in Appendix I, and the approximate location of the 10 tests is shown on Figure 3. All earth excavated through shovel testing was screened using 1/4" hardware cloth, and a shovel test log was kept.

## **RESULTS AND RECOMMENDATIONS**

A check of site records at TARL revealed there are no previously recorded sites within 1/2 kilometer of the project area. The area was examined through shovel testing, and no previously unrecorded sites were found. Shovel testing revealed deep sandy soils throughout the area with depths of nine of the tests ranging between 80 and 100 cm. Not one of the tests encountered clay. Most of the project area is located on a slope of a hill with only a small portion on what can be interpreted as high ground. Overall, the project area is viewed as a low probability area for significant archaeological sites. It is possible that a site may be present on top of the landform to the north, but this is outside the project area. It is, therefore, recommended that the Conroe ISD be allowed to proceed with construction as planned with no additional archaeological investigations. It is always possible that areas containing cultural resources are missed during any archaeological survey. Should any evidence of an archaeological site not discussed in this report be encountered during construction of the proposed water line, work in that area should cease until the situation can be evaluated by the Texas Historical Commission in consultation with Brazos Valley Research Associates and the Conroe ISD.



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## APPENDIX I: SHOVEL TEST LOG

Test	Depth	Results	Discussion
01	100	sterile	tan sand; clay not encountered
02	95	sterile	tan sand overlying orange clayey sand
03	100	sterile	tan sand; clay not encountered
04	90	sterile	tan sand; clay not encountered
05	90	sterile	dark tan sand over tan sand
06	80	sterile	orange clayey sand with pebbles
07	50	sterile	orange clayey sand with pebbles
08	90	sterile	tan sand; clay not encountered
09	80	sterile	tan sand; clay not encountered
10	80	sterile	tan sand; clay not encountered